



11-16-98

**SUBJECT: NUCLEAR MATERIALS MANAGEMENT AND  
SAFEGUARDS SYSTEM REPORTING AND DATA SUBMISSION**

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1. PURPOSE. To transmit revised pages to DOE M 474.1-2, NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM REPORTING AND DATA SUBMISSION, dated February 10, 1998.
2. EXPLANATION OF CHANGES. A four character numeric field has been added to the appropriate Nuclear Materials Management and Safeguards System (NMMSS) forms. Detailed instructions for completing the forms, identifying individual character fields by number have also been revised. These changes address Year 2000 compliance issues for reporting nuclear material information to NMMSS.
3. FILING INSTRUCTIONS.

a. <u>Remove Pages</u>	<u>Dated</u>	<u>Insert Pages</u>	<u>Dated</u>
I-9	2-10-98	I-9	11-16-98
IV-6	2-10-98	IV-6	11-16-98
V-1	2-10-98	V-1	11-16-98
VI-3,5,6,7,9,10,12, and 13	2-10-98	VI-3,5,6,7,9,10,12, and 13	11-16-98
VII-1,7,8, and 24	2-10-98	VII-1,7,8, and 24	11-16-98
VIII-2	2-10-98	VIII-2	11-16-98
IX-1,2 and 3	2-10-98	IX-1,2, and 3	11-16-98
X-2 and 3	2-10-98	X-2 and 3	11-16-98
Appendix A-5,6,7,8,12, 14, 17 and 18*	2-10-98	Appendix A-5,6,7,8,12,14, 17 and 18*	11-16-98

\*Copies of the NMMSS forms referenced in Appendix A of DOE M 474.1-2 are not available electronically and may be obtained from NAC International, Attn: Thomas Headley, NMMSS Project, P.O. Box 922088, Norcross, GA 30010 (telephone: 770-662-8110, extension 19).

- b. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:



RICK FARRELL  
DIRECTOR OF MANAGEMENT  
AND ADMINISTRATION

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DISTRIBUTION:  
All Departmental Elements

INITIATED BY:  
Office of Safeguards  
and Security

- (2) Block 2: Receiver's RIS. The shipper enters the receiver's RIS in this block if the transaction is a transfer of material from one facility to another. If applicable, for transactions involving normal operational losses/measured discards, accidental losses, and international accounts, the appropriate four-character symbol shall be entered. Care should be taken to assure that the receiving facility's symbol is reported and not the symbol of the agent handling the shipment. The shipper or originator enters its symbol in this block if the transaction is a one-party transaction (i.e., a transaction with an "M" or "P" action code). See Attachment I-2 for special instructions for importers and exporters of nuclear materials.
- (3) Block 3: Transaction Number. The shipper enters a consecutive number for the same shipper-receiver combination and assures that a number is not skipped in the series. This applies to both physical and nonphysical transfers of material. For transactions involving four-character symbol international accounts, the shipper enters "1001" in this block when reporting the first transaction for a specific shipper-receiver combination and shall assure that subsequent transactions for the same shipper-receiver combination are numbered consecutively (i.e., 1001, 1002, 1003, ...). For one-party transactions, it is desirable that the shipper enter the appropriate journal entry number to identify the transaction as it occurs, e.g., 20000105, the first four digits indicating the year, the next two digits indicating the month (i.e., 01 through 12), and the last two digits identifying the specific transaction in the month. Do not prefix or suffix the transfer series number. For one-party or in-place transactions between projects or uranium enrichment contracts, an alpha numeric transaction number may be used when necessary to maintain uniqueness.
- (4) Block 4: Correction Number. This block is used whenever a shipper or receiver is correcting or adjusting a previously issued DOE/NRC F 741/741A. In preparing the corrected copy, the shipper or receiver shall enter in blocks 1, 2, and 3, the same shipper RIS, receiver RIS, and transaction number (transfer series) used in the original report, and then shall enter in block 4 a consecutive correction number, beginning with "1." The corrected copy shall clearly identify the items being corrected. The party making the adjustment shall notify the other party to the transaction by telephone and follow up by issuing a corrected DOE/NRC F 741/741A.

e. DOE/NRC F 742 shall be completed by filling in the numbered blocks or lines as follows:

- (1) Block 1: Name and Address. Enter the name and address associated with your RIS.
- (2) Block 2: License Number(s). Enter the appropriate possession license number(s) if the reporting facility is a licensed contractor.
- (3) Block 3: Reporting Identification Symbol (RIS). Enter the assigned symbol under which the material being reported is, or was, held. A separate DOE/NRC F 742 shall be submitted for each symbol.
- (4) Block 4: Report Period. Enter inclusive dates. Year is represented with four numeric characters.
- (5) Block 5: Material Type. Enter the name of the material (see Figure IV-1, page IV-3). When U-235 and U-233 are mixed, enter the total element weight of the mixture in the element weight column on both the enriched uranium report and the uranium-233 report, and reflect this fact in a footnote on each report.
- (6) Block 7: DOE/NRC F 740M Attached. Only required for facilities selected under the U.S./IAEA Safeguards Agreement (see Attachment IV-1, page IV-14).
- (7) Line 8: Beginning Inventory - DOE-Owned. Enter inventory of DOE-owned material as of opening of business on the first day of the report period covered by the DOE/NRC F 742. These figures shall not differ from line 80 of the DOE/NRC F 742 submitted at the close of the preceding report period.
- (8) Line 9: Beginning Inventory - Not DOE-Owned. Enter inventory of non-DOE-owned material as of the opening of business on the first day of the report period covered by the DOE/NRC F 742. These figures shall not differ from line 81 of the DOE/NRC F 742 submitted at the close of the preceding report period.
- (9) Line 11: Procurement from DOE. Enter quantities of material purchased from DOE during the report period. (Quantities entered on line 11 shall not be entered on line 30.)

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Vertical line denotes change.

## Chapter V

### Material Activity Schedule

1. INTRODUCTION. DOE F DP-742B, "Material Activity Schedule," is required to be completed by each RIS holding DOE-owned leased/loaned nuclear material for the account of another RIS. The schedule shall be prepared semiannually as of March 31 and September 30. The preparer of DOE F DP-742B shall retain one copy of the completed schedule, and forward three copies to the financially responsible lessee/loanee who will use DOE F DP-742B to support DOE/NRC F 742. The DOE F DP-742B shall be distributed by the financially responsible lessee/loanee within 30 days of the close of the report period in accordance with paragraph 3 of this chapter.
2. PREPARATION OF DOE F DP-742B. DOE F DP-742B shall be completed by filling in the numbered blocks or lines as follows:
  - a. Block 1: Reporting RIS (Physical possessor). Enter your name, address, and symbol.
  - b. Block 2: RIS (Responsible under a lease). Enter the name, address, and symbol of financially responsible lessee/loanee.
  - c. Block 3: Material Type (Submit Separate Report for Each Type). Enter name of material (see Figure IV-1, page IV-3). Complete a separate DOE F DP-742B for each type of material.
  - d. Block 4: Report Period. Enter inclusive dates. Year is represented with four numeric characters.
  - e. Block 6: Quantity by Element and Isotope Weight. Use columns A and B to enter element and isotope weights as specified in Figure IV-1.
  - f. Line 8: Beginning Inventory - DOE-Owned. Enter inventory as of opening of business on the first day of the report period covered by DOE F DP-742B. These figures shall not differ from line 80 of the DOE F DP-742B submitted at the close of the preceding report period.
  - g. Line 30: Receipts. Enter, by transfer series, all receipts for the report period. If more space is needed than is provided on DOE F DP-742B, prepare a properly identified subschedule.
  - h. Line 40: Total. Enter the total of lines 8 and 30.
  - i. Line 51: Shipments. Enter, by transfer series, all shipments for the report period excluding shipments of waste to authorized receivers for disposal. If more space is needed than is provided on DOE F DP-742B, prepare a properly identified subschedule.

- c. Nuclear Material Type Codes, Material type codes, descriptions, and reporting units are given in Figure VI-1, page VI-4.
3. PREPARATION OF DOE F DP-733 AND DOE F DP-733A. The instructions which follow correspond to those data fields and columns appearing on both DOE F DP-733 and DOE F DP-733A. Facilities selected under the U.S./IAEA Safeguards Agreement should refer to Attachment VI-1 for guidance with respect to completion of the additional data elements appearing on DOE F DP-733A.
- a. Data Type Code, Column 1. Numeric codes (1 or 2) are preprinted on the form for each line entry of data to indicate to the NMMSS that inventory data are to be processed, and to identify the type of data being reported.
    - (1) Data Type Code 1 identifies data elements required for both domestic and IAEA reporting purposes.
    - (2) Data Type Code 2 identifies data elements required only for IAEA reporting purposes.
  - b. Inventory Report Date, Columns 2-9. Enter the inventory report date as follows:
    - (1) Columns 2 and 3. Enter the numeric designation for the month. The numeric designation for any month represented by a single digit (e.g., January) should be entered with a zero in column 2.
    - (2) Columns 4 and 5. Enter the numeric designation for the last day of the month, or if reporting under the U.S./IAEA Safeguards Agreement, the numeric designation for the day of the inventory. The numeric designation for any day represented by a single digit should be prefixed by a zero in column 4.
    - (3) Columns 6, 7, 8 and 9. Enter the four digits of the year.
  - c. Reporting Identification Symbol, Columns 10-13. Enter the reporting entity's symbol, left-justified.

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Vertical line denotes change.

d. Material Type Code, Columns 14-15. For each line entry of data, enter the applicable two-digit numeric code from Figure VI-1. The material type code should reflect the material assay range unless the material is being reported under one of the following inventory categories:

- (1) Losses - Weapons and Nonweapons - 42 U.S.C. §2121(b) Material. For material reported by assay range, use the appropriate material type code from the list below:

<u>Name of Material</u>	<u>Material Type Code</u>
Uranium-Depleted in U-235	11
Uranium-Enriched in U-235	21
Plutonium	51
Lithium-Enriched in Li-6	61
Uranium-Enriched in U-233	71

- (2) Losses - 42 U.S.C. §2121(c) Material. For material reported by assay range, use the appropriate material type code from the list below:

<u>Name of Material</u>	<u>Material Type Code</u>
Uranium-Depleted in U-235	11
Uranium-Enriched in U-235	21
Plutonium	51
Lithium-Enriched in Li-6	61
Uranium-Enriched in U-233	71

- (3) Scrap Data (Lines 971 through 974). If reporting scrap generated onsite, scrap recovered onsite, scrap recategorized on site, or scrap declared to the Central Scrap Management Office (CSMO), use the appropriate material type code from the list below:

<u>Name of Material</u>	<u>Material Type Code</u>
Uranium-Enriched in U-235	
>0.711% to <10.00%	21
10.00% and above	33
Plutonium	51

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Vertical line denotes change.

- (4) Total - Inventory Data (Line 899). If a total for material reported by assay range is to be entered on line 899, use the appropriate material type code from the list below:

<u>Name of Material</u>	<u>Material Type Code</u>
Uranium-Depleted in U-235	10
Uranium-Enriched in U-235	20
Plutonium-242	40
Plutonium	50
Lithium-Enriched in Li-6	60
Uranium-Enriched in U-233	70

- e. Inventory Composition Code, Columns 16-19. Enter the applicable numeric code (i.e., line number) from the DOE Inventory Profile report (NMMSS Report I-17), left-justified:

- (1) Inventory data are to be reported only on line numbers corresponding to entry (E) lines and on line 899.
- (2) For each type of material held on a facility's inventory, the facility must report a total on line 899 representing the sum of quantities reported on entry lines 020 through 874. The total on line 899 must agree with the sum of lines 80 and 81 on DOE/NRC F 742, "Material Balance Report." When reporting inventory data on line 899, the project number (columns 46-55), weight percent isotope (columns 61-66), and owner code (column 68) data fields are to be left blank.
- (3) Line numbers corresponding to header (H) and total (T) lines, with the exception of line 899, are not to be used by the reporting facility.
- (4) If "NMMSS Book Inventory" appears in a line title, the line is not to be used by the reporting facility.
- (5) A facility selected under the U.S./IAEA Safeguards Agreement shall enter the appropriate IAEA material description code, facility material description code, or IAEA material description code, as specified in the facility attachment or transitional facility attachment.
- (6) When reporting inventory data under the category "Unirradiated Scrap Material Awaiting Recovery" for depleted uranium, enriched uranium, plutonium-242, plutonium, normal uranium, or plutonium-238, enter the appropriate code from either "Classification of Unirradiated Uranium Scrap" (ANSI N15.1-1970) or "Classification of Unirradiated Plutonium Scrap" (ANSI N15.10-1987), as applicable.

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Vertical line denotes change.

- f. Element Weight, Columns 20-32. Enter total weight of all isotopes contained in the element being reported as prescribed in Figure VI-2, page VI-8, right-justified. Enter data to zero, one, or two decimal places, as required, with implied decimal between columns 30 and 31. (Note: Both element and isotope weight fields may not be asterisk, zero, or blank.)
- (1) For plutonium-238 and deuterium, use column 31 for the reporting of the decimal quantities to the nearest tenth of a reporting unit, and column 32 should be left blank or filled with a zero. For all other materials, columns 31 and 32 are to be left blank or filled with zeros.
- (2) To show less than 0.5 of a reporting unit, enter an asterisk (\*) in column 20, if applicable.
- g. Isotope Weight, Columns 33-45. Enter weight of the isotope(s) specified in Figure VI-2 for the element being reported, right-justified. Enter data to zero, one, or two decimal places, as required, with implied decimal between columns 43 and 44. (Note: Both element and isotope weight fields may not be asterisk, zero, or blank.)
- (1) For plutonium-238 and deuterium, use column 44 for the reporting of the decimal quantities to the nearest tenth of a reporting unit, and column 45 should be left blank or filled with a zero. For all other materials, columns 44 and 45 are to be left blank or filled with zeros.
- (2) To show less than 0.5 of a reporting unit, enter an asterisk (\*) in column 33, if applicable.
- h. Project Number, Columns 46-55.
- (1) For DOE-owned nuclear material, with the exception of lease or loan material, a project number is required for all inventory data reported on lines 020 through 874. A project number is not required for data reported on lines 903 through 995 under the miscellaneous data section. If applicable, enter the appropriate project number from the Project Number - Project Title Index (NMMSS Report T-141); otherwise, leave blank.
- (2) For each type of material held on a facility's inventory, the quantity assigned to each active project number must be reflected by data reported on lines 020 through 874. If, for a particular material type, the quantity to be reported on a particular line is assigned to more than one project number, an entry must be made for each project number using the same numeric code (i.e., line number) in columns 16 through 19.

Vertical line denotes change.

- i. Scrap Program, Column 56. If reporting data on line 971, 972, 973, or 974 under the semiannual scrap data category, enter one of the following one-character alphabetic codes to identify programmatic interest:
  - (1) "P" for production;
  - (2) "W" for weapons; or
  - (3) "X" for other than production or weapons.
- j. Reserved, Column 57. Make no entry.
- k. UEA Category Code, Columns 58-60. If a program has been developed to meet special requirements, enter an appropriate three-digit numeric code to further identify specific nuclear material holdings; otherwise leave blank. Use of columns 58 through 60 is not limited to the uranium enrichment activity (UEA).
- l. Weight % Isotope, Columns 61-66. For plutonium-238, enter the actual weight percent of the isotope Pu-238. For all other materials, no entry is required. However, for enriched uranium, the reporting entity may enter the actual weight percent of the isotope U-235 in addition to the material type code entered in columns 14 and 15. Weight percent isotope data are required to be maintained for uranium enrichment activity inventories and for certain portions of the Naval program inventories. Enter data to two and four decimal places, as required, with implied decimal between columns 62 and 63.
- m. UEA Production Code, Column 67. Make no entry.
- n. Owner Code, Column 68. An entry is required in this field for all inventories. Enter the appropriate code from the list below.

<u>Owner Code</u>	<u>Type of Ownership of Material</u>
A	DOE-owned, Lease or Loan Agreement - Waiver of Use Charge (Domestic)
B	DOE-owned, Lease or Loan Agreement - Nonwaiver of Use Charge (Domestic)
G	DOE-owned
H	Owned by Other U.S. Government Agencies
J	Privately Owned (Domestic)
R	Foreign Owned
S	DOE-owned, Lease or Loan Agreement (Foreign)
U	U.S. Enrichment Corporation Owner Code

- o. Reserved, Columns 69-74. Make no entry.

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- | p. Columns 75-80. If completing DOE F DP-733, they may be used. If completing DOE F DP-733A, see Attachment VI-1, page VI-11.
4. PREPARATION OF DOE/NRC F 742C. DOE/NRC F 742C shall be completed as follows:
- a. Block 1: Name and Address. Enter the name and address associated with your RIS.
  - b. Block 2: DOE/NRC F 740M Attached. Use only for facilities selected under the U.S./IAEA Safeguards Agreement; see Attachment VI-1, page VI-11.
  - c. Block 3: Inventory Date. Enter the date of the inventory which is being reported.
  - d. Block 4: Reporting Identification Symbol (RIS). Enter the assigned symbol under which the material being reported is, or was, held.
  - e. Block 5: License Number(s). Enter the appropriate license number(s) if the reporting facility is a licensed contractor.
  - f. Block 6: Batch Data. Unless specifically directed otherwise, the fields comprising this block of DOE/NRC F 742C shall be completed as specified in the detailed instructions for the corresponding fields of DOE F DP-733 or DOE F DP-733A. Data fields “j” through “n” are to be completed only by facilities selected under the U.S./IAEA Safeguards Agreement; see Attachment VI-1, page VI-11.
  - g. Block 7: Totals. Enter the total reported on line 899 for each type of material held on inventory.
  - h. Block 8: Signature. DOE/NRC F 742C shall be signed by the reporting facility's authorized representative.
  - i. Block 9: Title. Enter the title of the person whose signature appears in block 8.
  - j. Block 10: Date. Enter the date DOE/NRC F 742C was signed.
5. DISTRIBUTION OF DOE/NRC F 742C. Copies of the DOE/NRC F 742C shall be distributed in accordance with instructions provided by the cognizant Operations Office.

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3. PREPARATION OF DOE F DP-733A. The instructions which follow correspond to the additional data fields and columns appearing on DOE F DP-733A which must be completed to meet IAEA reporting requirements.
- a. Sequence Number, Columns 76-80. The sequence number is used in combination with data type code, inventory report date, RIS, material type code, and inventory composition code to associate corresponding type 1 and type 2 records. The type 2 record is a continuation of the type 1 record. Enter a consecutive number, beginning with the number 1, for each data entry, right-justified. The same number must appear in columns 76 through 80 of corresponding type 1 and type 2 records.
  - b. Type 2 Record Identification, Columns 1-19. The number 2 is preprinted on the form in column 1. Columns 2 through 19 must contain the same data as columns 2 through 19 of the corresponding type 1 record.
  - c. Batch Identification, Columns 20-35. A facility-unique batch name shall be created in accordance with paragraph 3.b.(4)(b) of Attachment I-4, page I-69. The same batch name must not appear more than once on the same DOE F DP-733A unless the data for a specific batch requires more than one line.
  - d. Number of Items, Columns 36-39. Enter the number of items contained in the batch, right-justified. When reporting bulk material in a single container, enter the number 1 in column 39.
  - e. Key Measurement Point (KMP), Columns 40-41. Enter the key measurement point code specified in the facility attachment or transitional facility attachment for the material in the batch, left-justified.
  - f. Measurement Basis, Column 42. Enter the appropriate code from the list below:
    - (1) “N” if batch data area based on measurements made at another material balance area and this is the first time the data are being reported for this material balance area;
    - (2) “L” if batch data are based on measurements made at another material balance area and the data have been previously reported for this material balance area;
    - (3) “M” if batch data are based on measurements made at this material balance area and this is the first time the data are being reported for this material balance area;  
or
    - (4) “T” if batch data are based on measurements made at this material balance area and the data have been previously reported for this material balance area.

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Vertical line denotes change.

- | g. Other KMP (OKMP), Columns 43-44. If the letter “M” was entered in column 42, enter the appropriate code to indicate the key measurement point where the measurements were made if different from the key measurement point indicated by the code in columns 40 and 41, left-justified.
- | h. Measurement Method, Column 45. If the letter “M” or “T” was entered in column 42, enter the appropriate code to indicate the method used for measurement, as specified in the facility attachment or transitional facility attachment.
- | i. Entry Status, Column 46. Enter the appropriate code from the list below:
  - (1) “N” if this is a “new” entry.
  - (2) “W” if this is a “was” entry, i.e., a previous entry that is being deleted or replaced. A “was” entry will be identical to the original entry except the values appearing in the element weight, isotope weight, and number of items data fields will have signs opposite those in the original entry.
  - (3) “V” if this is a “should be ” entry, i.e., an entry that is replacing a previous entry. A “should be” entry will be identical to the original entry with the exception of those data which are to replace data in the original entry. A “should be” entry must be accompanied by a corresponding “was” entry.
- | j. Concise Note Indicator, Column 47. Enter an “X” if a Concise Note submitted with the data refers to this batch.
- | k. Columns 48-75. Make no entry.
- l. Sequence Number, Columns 76-80. Refer to paragraph 3.a. of this attachment.
- 4. PREPARATION OF DOE/NRC F 742C. The data fields on DOE/NRC F 742C required to implement the reporting requirements of the U.S./IAEA Safeguards Agreement shall be completed according to the instructions for completion of the corresponding fields on DOE F DP-733A (see paragraph 3 of this attachment).

## **Chapter VII**

### **ADP Transcription Sheet, Nuclear Material Transaction Journal**

1. INTRODUCTION. This chapter provides instructions to DOE license-exempt contractors and NRC and "Agreement State" licensees that are DOE contractors for the preparation of DOE F DP-740, "ADP Transcription Sheet, Nuclear Material Transaction Journal," and DOE F DP-740A, "ADP Transcription Continuation Sheet, Nuclear Material Transaction Journal."
- a. DOE F DP-740 and 740A are used to report nuclear materials transaction data to the NMMSS. The data should be transcribed from DOE/NRC F 741/741A and shall accurately reflect the data entered on the related F 741/741A. To make such transcription easier, the blocks on DOE/NRC F 741/741A which correspond to data fields on DOE F DP-740 and DOE F DP-740A are identified in the detailed instructions below.
- b. Special Procedures. In some cases, special procedures must be used in order to report transaction data properly using DOE F DP-740 and 740A.
  - (1) Inventory Difference Explanation Data. The special procedures for use of DOE F DP-740 to report inventory difference explanation data are given in Paragraph 4 of this Chapter (these data do not require completion of the DOE/NRC F 741/741A).
  - (2) Amendments or Adjustments. The restrictions on and special procedures for amending, adjusting, or deleting previously submitted data are given in Paragraph 3., page VII-17.
  - (3) F DOE-284. DOE F DP-740 shall be used to submit to the NMMSS data reported on F DOE-284. When submitting such data, only the transaction identification (columns 1-18), data code (column 19), and action date (columns 70-77) fields of data record number 1 on DOE F DP-740 are to be completed. Column 16 must contain the letter "A," and column 18 must contain the letter "N" if the receiver intends to make independent measurements within 30 calendar days of receipt of material or the letter "U" if completion of receiver's measurements will be delayed beyond 30 calendar days. (Note: Action codes "N" and "U" will not assign the material to a project number.)
  - (4) Import and/or Export of Nuclear Materials. The special procedures for use of DOE F DP-740 and 740A by U.S. facilities engaged in the import and/or export of nuclear materials are given in Paragraph 5., page VII-25.

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Vertical line denotes change.

- (6) DOE F DP-740: Columns 31-33. Make no entry.
- (7) Transfer Authority (Contract, NM Draft, or Order Number), DOE F DP-740: Columns 34-50 (DOE/NRC F 741: Block 15). Enter, left-justified:
  - (a) Contract number on sale, lease/loan, usage agreement, or uranium enriching feed transactions.
  - (b) Contract number and order number on uranium enriching product transactions.
  - (c) Draft number appearing on F DOE-437, "Nuclear Material Draft," authorizing the transfer, if applicable (optional).
  - (d) Contract number or other control number (e.g., shipper's export declaration number) on a transfer authorized under an export/import license number.
  - (e) Retransfer authorization number on foreign transfers of material of U.S. interest.
  - (f) Imbedded punctuation characters are to be omitted for reporting of contract numbers, except for a dash between contract number and order number.
- (8) DOE F DP-740: Columns 51-68. Make no entry.
- (9) IAEA Reportable, DOE F DP-740: Column 69 (DOE/NRC F 741: Block 17). Required under certain circumstances delineated in Chapter I (and its attachments) of this Manual for IAEA reporting under the U.S./IAEA Safeguards Agreement. Facilities engaged in import or export of nuclear materials should refer to Paragraph 5.d., page VII-25, for special instructions. If applicable, enter "R" or "N"; otherwise make no entry.
- (10) Action Date, DOE F DP-740: Columns 70-77 (DOE/NRC F 741: Block 20).
  - (a) If replacing previously reported transaction data, enter the date of the original transaction.
  - (b) If reporting inventory difference explanation data (I entries), enter the date of the corresponding inventory difference (inventory change code 77) entry.

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Vertical line denotes change.

- (c) If reporting Form DOE-284 data, enter the date of receipt.
- (d) If the receiver completes a safeguards closure within 10 days of receipt of material and is reporting both the date of receipt and the date of safeguards closure, two separate entries are required, with action code “N” and action code “S”, respectively. If the receiver completes independent measurements within 10 days of receipt of material and is reporting both the date of receipt and the date of measurement, two separate entries are required, with action code “N” and action code “E”, respectively.
- (e) Otherwise, enter the date the activity occurs.
- (f) The numbers representing the month should be entered in the first two columns, the day of the month in the next two columns, and the last four digits of the year in the final four columns. For example, January 3, 2000, would be recorded as 01032000.

- (11) DOE F DP-740: Columns 78-79. Make no entry.
- (12) Concise Note, DOE F DP-740: Column 80 (DOE/NRC F 741: Block 21.B or 21.C). Required under certain conditions delineated in Chapter I (and attachments) of this Manual for IAEA reporting under the U.S./IAEA Safeguards Agreement. Facilities engaged in the import and/or export of nuclear materials should see Paragraph 5, page VII-25, for special instructions. If applicable, enter an “X” to indicate that a Concise Note (DOE/NRC F 740M instructions are contained in Chapter III) is attached; otherwise, leave blank.

c. Data Record Number 2 - Detail Information.

- (1) Data Code, DOE F DP-740: Column 19 (DOE/NRC F 741/741A: Block 8). The entry “2” is preprinted on the form.
- (2) Line Number, DOE F DP-740: Columns 20-21 (DOE/NRC F 741: Block 24.A or 25.A). Enter the unique sequential number (01 through 99 for one transaction) which identifies a discrete line. This same number must be used for data record number 5, i.e., the line number becomes the specific identifier by which 2 and 5 data records can be paired correctly. For adjustment transactions, the lines do not have to be numbered sequentially but the shipper and receiver must be compatible. If possible, the lines of the adjustment entry that contain negating values should have the same line numbers as the original lines being adjusted.

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Vertical line denotes change.

- e. Signs of Quantities Reported. In calculating and reporting inventory difference and inventory difference explanation data, the following rules shall be observed:
- (1) An individual quantity shall be reported as positive if it represents the amount of material by which the ending physical inventory is less than the corresponding book inventory.
  - (2) An individual quantity shall be reported as negative if it represents the amount of material by which the ending physical inventory is greater than the corresponding book inventory. Negative quantities are identified by either placing a dash over the last digit in the field or a minus sign in the column preceding the first digit.
- f. Detailed Instructions. The following procedure shall be used to report inventory difference explanation data on DOE F DP-740.
- (1) Transaction Identification (Columns 1-18). Enter the identification of the transaction exactly as shown on the DOE/NRC F 741/741A used to document the inventory difference being explained, except that the letter "I" shall be entered in the action code field (column 18).
  - (2) General Information (Record Type 1). Entries are required only in the number of lines field (columns 20-21), the action date field (columns 70-77) and, if appropriate, the RIS for account field (columns 23-26). The date entered in the action date field shall be the same as the action date on the DOE/NRC F 741/741A documenting the inventory difference being explained.
  - (3) Detail Information (Record Types 2 and 5). Enter data in the following fields, according to the rules given in the general instructions for use of DOE F DP-740:
    - (a) Line Number (Columns 20-21). See 2.c.(2) in this Chapter.
    - (b) Type of Inventory Difference (Record Type 2, Columns 22-23). Enter the appropriate two-digit code as listed above in Paragraphs 4.b.-4.d.
    - (c) Project Number (Record Type 2, Columns 44-53). An entry in this field is optional, but if used, see Paragraph 2.c.(6) in this Chapter.
    - (d) Material Type (Record Type 2, Columns 54-55). See Paragraph 2.c.(7) in this Chapter.
    - (e) Owner Code (Record Type 2, Column 61). See Paragraph 2.c.(10) in this Chapter.

- (5) Transaction Codes (TRAN. CODE).
- (a) Processing Code (PROC. CODE), DOE F DP-749: Column 16. Enter the appropriate one-character, alphabetic code from the list below to identify the specific type of processing action required.
- 1 “A” for initial entry of data to report a transaction.
  - 2 “C” for replacement of data for a transaction. An initial entry cannot be replaced after the close of a processing period.
  - 3 “D” for deletion of a transaction. An initial entry cannot be deleted after the close of a processing period.
- (b) DOE F DP-749: Column 17. Make no entry.
- (c) Action Code (ACT. CODE), DOE F DP-749: Column 18. The entry P,” is preprinted on the form to identify in-place transfers between projects.

b. Header Information - Data Record Number 1.

- (1) Data Code, DOE F DP-749: Column 19. The entry “1” is preprinted on the form.
- (2) Number of Lines, DOE F DP-749: Columns 20-21. Enter numeric digits (01-99) to indicate the total number of detail information lines pertaining to a specific transaction.
- (3) DOE F DP-749: Columns 22-23. Make no entry.
- (4) Sealed Source Serial Number, DOE F DP-749: Columns 24-33. Make no entry.
- (5) Contract/Identification Number, DOE F DP-749: Columns 34-50: Use is optional.
- (6) DOE F DP-749: Columns 51-69. Make no entry.
- (7) Action Date, DOE F DP-749: Columns 70-77. Enter the date the activity occurs. In the event of a correction, the date to be entered here is the date of the activity and not the date of the original transaction. The numbers representing the month should be entered in the first two columns, the day of the month in the next two columns, and the last four digits of the year in the final four columns. For example, January 5, 2000, would be recorded as 01052000.
- (8) DOE F DP-749: Columns 78-80. Make no entry.

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Vertical line denotes change.

## Chapter IX

### ADP Transcription Sheet, Contract Reclassifications (Internal Transfers)

1. INTRODUCTION. This chapter provides instructions to DOE license-exempt contractors and NRC and "Agreement State" licensees that are DOE contractors for the preparation of DOE F DP-749A, "ADP Transcription Sheet, Contract Reclassifications." DOE F DP-749A is to be used for reporting to the NMMSS transfers of material between uranium enrichment contracts under the same RIS. DOE F DP-749A is limited to the reporting of uranium enrichment activity. Data submitted to the NMMSS either on F DP-749A or by approved automated means shall accurately reflect the internal contract transfers entered on the related F 741/741A.
2. AUTOMATED DATA TRANSMISSION.
  - a. Facilities transmitting data to the NMMSS by automated means need not complete DOE F DP-749A, but must follow the data format defined in these instructions.
  - b. In all cases where a dash over a digit is used to indicate negative values, the EBCDIC representation of the negative value shall be used.
3. PREPARATION OF DOE F DP-749A. Internal contract transfers shall be reported to the NMMSS on DOE F DP-749A in accordance with the following instructions.
  - a. Transaction Identification - Header and Detail Records. Transaction identification information (columns 1-18), described below, is common to both header and detail records.
    - (1) Shipper RIS, DOE F DP-749A: Columns 1-4. Enter the symbol of the shipper, or originator, in transactions involving contract transfers, left-justified.
    - (2) Receiver RIS, DOE F DP-749A: Columns 5-8. Enter the symbol of the receiver in transactions involving contract transfers, left-justified. The shipper and receiver symbols must be the same.
    - (3) Internal Transaction Number, DOE F DP-749A: Columns 9-14. Enter number which indicates a specific transfer in a transfer series. An alphanumeric journal entry number may be used in lieu of the transfer number.
    - (4) Correction Number, DOE F DP-749A: Column 15. When a shipper or receiver issues a corrected document to adjust data previously reported, an alphanumeric character is appended to the original transfer number to identify the transaction as a correction. For correction or adjustment entries, this is a required data field. For all other transactions, this field is left blank.

Vertical line denotes change.

(5) Transaction Codes (TRANS CODE).

(a) Processing Code (PROC CODE), DOE F DP-749A: Column 16. Enter the appropriate one-character, alphabetic code from the list below to identify the specific type of processing action required.

1 A for initial entry of data to report a transaction.

2 C for replacement of data for a transaction. An initial entry cannot be replaced after the close of a processing period.

3 D for deletion of a transaction. An initial entry cannot be deleted after the close of a processing period.

(b) DOE F DP-749A: Column 17. Make no entry.

(c) Action Code (ACT CODE), DOE F DP-749A: Column 18. The entry "P" is preprinted on the form to identify in-place transfers between uranium enrichment contracts or usage agreement contracts.

b. Header Information - Data Record Number 1.

(1) Data Code, DOE F DP-749A: Column 19. The entry "1" is preprinted on the form.

(2) Number of Lines, DOE F DP-749A: Columns 20-21. Enter numeric digits (01-99) to indicate the total number of detail information lines pertaining to a specific transaction.

(3) DOE F DP-749A: Columns 22-33. Make no entry.

(4) Contract Number - From, DOE F DP-749A: Columns 34-50. Enter the account from which the material is being deducted (left-justified).

(5) Contract Number - To, DOE F DP-749A: Columns 51-69. Enter the account to which the material is being added (left-justified).

(6) Action Date, DOE F DP-749A: Columns 70-77. Enter the date the activity occurs. In the event of a correction, the date to be entered here is the date of the activity and not the date of the original transaction. The numbers representing the month shall be entered in the first two columns, the day of the month in the next two columns, and the last four digits of the year in the final four columns. For example, January 5, 2000, would be recorded as 01052000.

| (7) DOE F DP-749A: Columns 78-80: Make no entry.

c. Detail Information - Data Record Number 2.

(1) Data Code, DOE F DP-749A: Column 19. The entry "2" is preprinted on the form.

(2) Line Number, DOE F DP-749A: Columns 20-21. Enter a sequential number (01 through 99 for one transaction) to identify a discrete line.

| (3) Country Control Number, DOE F DP-749A: Columns 22-31. In order to identify and account for foreign origin nuclear materials entering, leaving, used, or processed in the U.S., it is necessary to supply the country control numbers (CCN's) for any depleted uranium, enriched uranium, plutonium, uranium-233, normal uranium, plutonium-238, or thorium involved in a transaction. The CCN is structured to reflect not only the country of origin but also the country providing isotopic separation services, the country in which reactor products are produced, and the existence of any special usage conditions attached by a country or international organization. The CCN consists of an eight-character alphanumeric code composed of the four sets of two-character alphanumeric codes described below. For detailed instructions for completion of this block refer to Attachment I-3, page I-63.

(a) The country of origin of the source material: characters 1 and 2 (columns 22-23).

(b) The country providing isotopic separation services that originally produced the depleted or enriched uranium: characters 3 and 4 (columns 24-25).

(c) The country in which reactor products are produced: characters 5 and 6 (columns 26-27).

(d) Any other country or international organization attaching safeguards conditions to the material in addition to safeguards conditions attached by a country identified in one of the first three sets of two-character codes: characters 7 and 8 (columns 28-29). For columns 30-31, see below.

(4) DOE F DP-749A: Columns 30-31. Make no entry.

- (f) Make no entry in column 17.
  - (g) Action Code in column 18.
  - (h) Record Type Code "6" is preprinted on the form in column 19.
  - (i) If applicable to a DOE/NRC F 741/741A, all of the above data elements must agree exactly with the corresponding data elements of the transaction to which the Concise Note refers.
- (2) Material Balance Data. If the Concise Note applies to material balance data reported on DOE/NRC F 742, the following information is required:
- (a) Record Type Code "6" is preprinted on the form in column 1.
  - (b) RIS of the reporting MBA in columns 2-5, left-justified.
  - (c) Material Type in columns 6-7, filled.
  - (d) Start Date of the material balance period (MM/DD/YYYY format) in columns 8-15, filled.
  - (e) End Date of the material balance period (MM/DD/YYYY format) in columns 16-23, filled.
- (3) Inventory Data. If the Concise Note applies to inventory data reported on DOE F DP-733A or on DOE/NRC F 742C, the following information is required:
- (a) Record Type Code "6" is preprinted on the form in column 1.
  - (b) Inventory Date (MM/DD/YYYY format) in columns 2-9, filled.
  - (c) RIS of the reporting MBA in columns 10-13, left-justified.
  - (d) Make no entry in columns 14-23.

b. Batch Identification or Material Balance Category, Columns 24-39.

- (1) Transaction or Inventory Data. Enter the name of the batch to which the Concise Note applies.

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Vertical line denotes change.

(2) Material Balance Data.

- (a) If the DOE/NRC F 742 line number to which the Concise Note applies is 11, 13, 30, 38, 39, 42, 43, 51, 58, or 59, enter the line number-reporting identification symbol combination. For example, 11-ABC.
- (b) If the DOE/NRC F 742 line number to which the Concise Note applies is 22 or 71, enter the line number-inventory change type combination. For example, 22-DN.
- (c) For the remaining DOE/NRC F 742 line numbers, enter the line number to which the Concise Note applies.

(3) If the Concise Note applies to a transaction or inventory or material balance report as a whole, enter "WHOLE REPORT," left-justified.

(4) If the Concise Note does not apply to a specific transaction or inventory or material balance report, enter "GENERAL," left justified. General Concise Notes must be entered through the transaction data system with an M action code (see paragraph 3.a.(1) above).

| c. Sequence Number, Columns 40-41. For each batch identification or material balance category, number each line of text using 01, 02, 03, ..., 99.

| d. Concise Note Text, Columns 42-80. Code in free form text whatever explanatory comments are desired; however, the following special characters shall not be used: pound sign; slash; semi-colon; colon.